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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,636	09/29/2003	Gary Vacon	160-007	1124

34845 7590 06/08/2006
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EXAMINER

NGUYEN, KHAI MINH

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,636

Applicant(s)

VACON ET AL.

Examiner

Khai M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 7, 9, 14, 16 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 7, 9, 14, 16 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 2, 7, 9, 14, 16, and 21 have been considered but are moot in view of the new ground(s) of rejection.
2. The indicated allowability of claims 7, 14 and 21 are withdrawn because the newly discover reference(s) teaching all the claimed limitations.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 7, 14 and 21, the phrase "may be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaszewski et al. (U.S.Pat-5933420).

Regarding claim 2, Jaszewski teaches a first access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1, abstract), the first access point comprising:

a receiver operable to detect a signal from a second access point (fig.1-2, col.3, line 59 to col.4, line 25), distinguish that signal from other signals (fig.1-2, col.6, lines 30-45), and measure strength of the signal (fig.1-4, col.6, lines 30-45, col.6, line 63 to col.7, line 8, claim 1); and

an indicator operable to provide an external indication of the strength (fig.1-4, col.6, lines 30-45, col.6, line 63 to col.7, line 8), the indication being perceivable by human being wherein the external indication is related to the signal strength (fig.2-4, col.9, line 60 to col.10, line 44);

whereby proximity of the second access point relative to the first access point can be estimated without knowing the precise geographic location of the second access point (fig.2-4, col.9, line 60 to col.10, line 44).

Regarding claim 9, Jaszewski teaches a method executed by the first access point for facilitating deployment of the first access point (fig.1-4, access point 1-4, abstract) comprising the steps of:

receiving a plurality of signals (fig.1-2, col.2, lines 23-42, col.3, line 59 to col.4, line 25);

distinguishing, in the plurality of signals, a signal from a second access point (fig.1-2, col.6, lines 30-45);

determining a signal strength of the signal from the second access point (fig.1-4, col.6, lines 30-45, col.6, line 63 to col.7, line 8, claim 1); and

providing on the access point an external indication of the signal strength that is perceptible by human being (fig.2-4, col.9, line 60 to col.10, line 44),

whereby the first access point's proximity relative to the second access point can be estimated without knowing the precise geographic location of the location of the second access point (fig.2-4, col.9, line 60 to col.10, line 44).

Regarding claim 16, Jaszewski teaches a program product comprising a computer readable medium having embodied therein a computer program for storing data (fig.1-4, abstract, col.3, lines 27-32), the computer program comprising:

logic operable to detect a signal from an access point, distinguish that signal from other signals, and measure strength of the signal (fig.1-2, col.3, line 59 to col.4, line 25);
and

logic for causing a human-perceptible external indication of the signal strength (fig.2-4, col.9, line 60 to col.10, line 44),

whereby the relative proximity of the access point can be estimated without knowing the precise geographic location of the access point (fig.2-4, col.9, line 60 to col.10, line 44).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaszewski et al. (U.S.Pat-5933420) in view of Halasz (U.S.Pat-6732163).

Regarding claim 7, Jaszewski teaches an access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1-4, abstract), the access point comprising:

a controller capable of automatically choosing one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 44), said controller choosing said frequency after evaluating frequencies on which other access points may be operating (fig.2-4, col.9, line 60 to col.10, line 63), said controller comprising:

Jaszewski fails to specifically disclose a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the

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plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.

Regarding claim 14, Jaszewski teaches a method comprising the steps of:

providing an access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-4, access point 1-4, abstract);

automatically choosing by the access point one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 63), after evaluating frequencies on which other access points may be operating (fig.2-4, col.9, line 60 to col.10, line 63), wherein the step of automatically choosing comprises the steps of:

Jaszewski fails to specifically disclose a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. picking a frequency; b. transmitting on said frequency; c. receiving on said frequency; d. evaluating whether other access points are heard on said frequency; e. reducing transmission power; f. evaluating whether said other access points are still heard on said frequency; g. storing the transmission power at which no other access points are heard; h. picking a next frequency as the frequency and repeating steps b-g

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until all of the plurality of frequencies has been picked; i. comparing said stored transmission powers; j. choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.

Regarding claim 21, Jaszewski teaches a program product comprising a computer readable medium having embodied therein a computer program for storing data (fig.1-4, abstract, col.3, lines 27-32), the computer program comprising:

logic for operation in an access point (fig.1-2, col.3, line 59 to col.4, line 25), the access point operable to provide wireless network access to client devices coupled to a wireless network (fig.1-2, col.3, line 59 to col.4, line 25), the logic for automatically choosing one of a plurality of radio frequencies on which to operate (fig.2-4, col.9, line 60 to col.10, line 63), the logic choosing said frequency after evaluating frequencies on which other access points may be operating (fig.2-4, col.9, line 60 to col.10, line 63), the logic comprising:

Jaszewski fails to specifically disclose a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic

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for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power. However, Halasz teaches a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power (fig.4, col.8, line 45 to col.9, line 48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a. logic for picking a frequency; b. logic for transmitting on said frequency; c. logic for receiving on said frequency; d. logic for evaluating whether other access points are heard on said frequency; e. logic for reducing transmission power; f. logic for evaluating whether said other access points are still heard on said frequency; g. logic for storing the transmission power at which no other access points are heard; h. logic for picking a next frequency as the frequency and repeating steps b-g until all of the plurality of frequencies has been picked; i. logic for comparing said stored transmission powers; j. logic for choosing for operation the frequency associated with the highest stored transmission power as taught by Halasz with Jaszewski teaching in order to provide a

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method for selecting an operating frequency for a communication device that selects an optimal non-overlapping operating frequency.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571.272.7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khai Nguyen
Au:2617


GEORGE ENG
SUPERVISORY PATENT EXAMINER

5/31/2006